

Appln. No. 10/721,613
Docket No. 14XZ129307/GEM-0107

REMARKS / ARGUMENTS

Applicant appreciates the Examiner for taking the time on July 23, 2007 to discuss by telephone the Advisory Action dated July 10, 2007 and clarify the Examiners comments. Applicant further appreciates the Examiner's willingness to conduct an interview on the present application prior to the first action under this RCE.

Status of Claims

In the Office Action, the Examiner noted that Claims 1-23 are pending in the application. By this Amendment, Claims 1 and 23 have been amended, Claim 22 has been canceled, and Claims 24-25 have been added, leaving Claims 1-21 and 23-25 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. § 103(a) have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Rejections Under 35 U.S.C. §103(a)

Claims 1-15 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nicolas et al. (European Patent Application EP 1 113 392, hereinafter "Nicolas") in view of Neitzel et al. (U.S. Patent No. 5,550,888, hereinafter "Neitzel") and Langan et al. (WO 01/69532, hereinafter "Langan").

Claims 16-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Neitzel and Langan as applied to Claim 1 above, and further in view of J. Kaufhold et al. "A Calibration Approach to Glandular Tissue Composition Estimation in Digital Mammography", (hereinafter "Kaufhold").

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nicolas, Neitzel and Langan as applied to Claim 22 above, and further in view of common

Appl. No. 10/721,613
Docket No. 14XZ129307/GEM-0107

knowledge in the art as shown by Gonzalez et al., "Digital Image Processing," Prentice-Hall, Inc., page 85.

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection for the Claims as amended would be improper as the References fail to teach or suggest each and every element of the instant invention in such a manner as to perform as the claimed invention performs. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

Dependent claims inherit all of the limitations of the respective parent claim and any intervening claim.

Regarding Independent Claim 1

Independent Claim 1 has been amended to incorporate the limitations of former Claim 22 and further clarify that the method defines "*segmented regions of the object*" No new matter has been added by this amendment, antecedent basis may be found in the original application in paragraph [0025] for example. In Final Office Action, the Examiner asserted (with respect to former Claim 22) that "Nicolas discloses determining a threshold based upon a histogram of the object in the image of the radiological thicknesses and defining regions of the object based upon the threshold (see for example the abstract)." [paper 20070416, page 7]

Applicant respectfully disagrees and asserts that Independent Claim 1, as amended is not obvious in light of the combination of Nicolas, Neitzel and Langan.

Applicant finds Nicolas to teach "...the pixels having a level below or above a predetermined threshold being returned at least to the value of the threshold, while preserving the differences and real ratios between the anatomical structures." [Nicolas, Abstract]

Appln. No. 10/721,613
Docket No. 14XZ129307/GEM-0107

Applicant respectfully submits that preserving differences and real ratios between anatomical structures is substantially different from the claimed defining regions of the object based upon the threshold. Applicant submits that preserving differences and real ratios provides a transformation that merely maintains a particular observable *relative state* of images of the anatomical structures, which is distinguishable from the claimed defining segmented regions of the object based upon the threshold.

Furthermore, Applicant finds Neitzel to teach "The invention enables the user to preset the contrast and the density of the visible image in conformity with his requirements and independently from one another." [Neitzel, Abstract] and Langan to teach "A method and apparatus ... for performing a contrast-based dynamic range management (C-DRM) algorithm" [Langan, Abstract], and submits that neither Neitzel nor Langan teach the claimed ... *defining segmented regions of the object based upon the threshold*.

Accordingly applicant respectfully submits that the combination of Nicolas, Neitzel, and Langan fails to teach each and every element of the claimed invention arranged in such a manner to perform as the claimed invention performs, and therefore cannot support a prima facie case of obviousness.

In view of the foregoing, Applicant submits that the References fail to teach or suggest each and every element of the claimed invention arranged to perform as the claimed invention performs and are therefore wholly inadequate in their teaching of the claimed invention as a whole, and disclose a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

Claims 2-21, 23-25 depend either directly or indirectly from Independent Claim 1 and therefore also incorporate all of the limitations of independent Claim 1 and include additional limitations not found in the prior art. For example, dependent Claim 23

Appln. No. 10/721,613
Docket No. 14XZ129307/GEM-0107

includes the limitation that the segmented regions define an adipose and fibro-glandular regions. Applicant respectfully submits that Examiner's rejection under 35 U.S.C. §103(a) has been traversed. In view of the foregoing, Applicant submits that the cited references fail to teach or suggest each and every element of the claimed invention and are therefore wholly inadequate in their teaching of the claimed invention as a whole, fail to motivate one skilled in the art to do with the patent Applicant has done, fail to offer any reasonable expectation of success in combining the reference to perform as the claimed invention performs, and discloses a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal the rejection under 35 U.S.C. §103(a) and allowance of Claims 10-13, 15-18, and 28-31 is respectfully requested.

In light of the foregoing remarks and amendments, Applicant respectfully submits that foregoing clarifying remarks comply with 37 C.F.R. §1.116 and in consideration thereof, the Examiner's rejections under 35 U.S.C. §103(a) have been traversed, and that the application is now in condition for allowance. Such action is therefore respectfully requested.

Applicant's Attorneys appreciate Examiner's willingness to conduct an interview prior to the first action on the RCE and believes this would assist in advancing this case to allowance, the Examiner is cordially invited to contact the undersigned to arrange this discussion.

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 50-2513.

Appln. No. 10/721,613
Docket No. 14XZ129307/GEM-0107

For the reasons advanced above, Applicant respectfully submits that the application is in condition for allowance and that action is earnestly solicited.

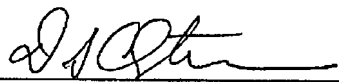
If there are any additional charges with respect to this Reply or otherwise, please charge them to Deposit Account No. 50-2513 maintained by Applicants' Attorney's.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account 50-2513.

Respectfully submitted,

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